

Method and apparatus for improving the leveling performance of an elevator

Abstract

The present invention provides an elevator position compensation system which minimizes the re-leveling of an elevator car in an elevator shaft. The elevator car is suspended in the shaft by an elevator cable system and elevator motor, wherein the elevator position compensation system comprises an elevator load sensor device for determining the weight of the elevator car, and generating a load signal indicative of the determined weight. An elevator position sensor determines the position of the elevator car in the elevator shaft and generates a position signal indicative of the determined elevator car position. An elevator control system receives the load signal and the position signal, which is processed by the control system in order to calculate a change in the cable system length associated with a load change within the elevator car, and wherein the calculated change in the cable system length is compensated by the elevator motor.